Invesco Advisers, Inc.
PO Box 4333
Houston, TX 77210-4333
11 Greenway Plaza, Suite 1000
Houston, TX 77046

713 626 1919
www.invesco.com

March 28, 2016

VIA ELECTRONIC SUBMISSION

rule-comments@sec.gov
Brent J. Fields, Secretary
U.S. Securities and Exchange Commission
100 F Street, N.E.
Washington, DC 2549-1090

Re: File No. S7-24-15
Comment on Use of Derivatives by Registered Investment Companies and Business Development Companies Proposal

Dear Mr. Fields:

Invesco Advisers, Inc. ("Invesco") appreciates the opportunity to provide comments to the U.S. Securities and Exchange Commission ("Commission") in response to the Proposed Rule published on December 28, 2015.[1] Invesco is a registered investment adviser and indirect wholly-owned subsidiary of Invesco Ltd. We are pleased that the Commission, as the primary regulator of funds, seeks to provide an updated and more comprehensive and consistent approach to the use of derivative instruments and other senior securities transactions consistent with the investment protection purposes and concerns underlying section 18 of the Investment Company Act of 1940 ("Investment Company Act"). The Commission has the greatest understanding of the asset management industry and a long history of prudently overseeing and regulating asset managers, their products and activities, and establishing reasonable guardrails to ensure appropriate protections for investors.

Invesco Ltd., Invesco's parent company, is a leading independent global investment manager with approximately $775.6 billion in assets under management ("AUM") as of December 31, 2015. Invesco Ltd.'s investment manager subsidiaries advise mutual funds, exchange-traded funds ("ETFs") and closed-end funds for a broad client base with a combined AUM of approximately $316.4 billion as of December 31, 2015. The 145 open-end mutual funds and 15 closed-end funds Invesco currently offers include a wide range of

[1] Use of Derivatives by Registered Investment Companies and Business Development Companies, Investment Company Act Release No. IC-31933, 80 Fed. Reg. 80884 (proposed on Dec. 11, 2015) ("Proposed Rule" or "Proposal").

actively-managed, domestic, international/global, specialty (including alternative) and fixed income funds to help investors achieve their unique investment objectives. Invesco's affiliated investment manager, Invesco PowerShares Capital Management LLC, currently offers over 130 ETFs spanning seven broad categories: specialty, commodities and currencies, equity-based resources, factor driven, alternatively weighted, income and quantitative. Invesco and its affiliates also have extensive experience and expertise with European investment funds, managing more than 80 Ireland and Luxembourg domiciled UCITS funds across equity, fixed income, and alternative strategies offered to retail shareholders with an AUM of over $54 billion as of December 31, 2015 ("Invesco UCITS").[2] Because the Invesco UCITS funds are subject to regulatory limits on the amount of leverage those funds may obtain through the use of derivative instruments, Invesco is well positioned to understand the implications and consequences of regulatory leverage limits and the risks associated with the use of derivative instruments, in general.

I. Executive Summary

Invesco supports the Commission's efforts to revisit its guidance on funds' use of derivatives and harmonize asset segregation practices throughout the industry. We believe, however, that the Proposal has approached complex instruments in an overly simplistic manner because it fails to differentiate appropriately between risk-mitigating and speculative practices involving the use of derivatives and the corresponding impact to a fund's overall market risk.

As the Commission acknowledges in the Proposal, prudent use of derivative instruments benefits funds and their investors in many ways.[3] For example, funds use derivatives as efficient hedging and risk management tools; for facilitation of diversified portfolios; to equitize cash held in a fund's portfolio; to enhance performance through cost-effective investments; to facilitate exposure to commodities and other alternative investments; to gain exposure to restricted markets and investments, such as currencies of emerging markets countries; and in the case of fixed income funds, as an effective tool to adjust a portfolio's exposure to interest rate risk and to make duration adjustments.[4] Accordingly, a rule that indiscriminately restricts the use of derivatives would harm funds and their investors. In particular, arbitrarily restricting a fund's use of derivative instruments could cause the following detrimental effects for a fund: holding unhedged exposures; foregoing exposures to desirable markets and investment strategies; becoming less diversified; incurring additional costs by pursuing less efficient strategies and investing

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[2] A UCITS is an open-end investment company regulated and marketed in European countries pursuant to a relevant EU member's Undertakings for Collective Investments in Transferable Securities (UCITS) guidelines.

[3] Proposal at 7, citing Use of Derivatives by Investment Companies under the Investment Company Act of 1940, Investment Company Act Release No. 29776 (Aug. 31, 2011), at n. 5.

[4] Duration is generally defined as the approximate percentage change in price for a 100 basis point change in interest rates.

in riskier assets; and increasing certain risks, such as currency risk.[5] Additionally, indiscriminately restricting funds' derivatives use could increase tracking error for those funds that track an index.

Invesco approaches the Proposal with extensive experience in, and expertise with, the prudent use of derivative instruments in retail mutual funds and ETFs. Specifically, of the $302.7 billion in AUM of Invesco managed retail mutual funds and ETFs, approximately $13.0 billion of AUM involves fixed income, international equity and tactical allocation funds that are significant users of derivative instruments. These products address a growing investor demand for strategies seeking positive returns with low or limited risk and in some cases return patterns that are uncorrelated to equity markets. These funds use derivative instruments predominately for hedging and risk mitigating purposes, as well as for duration adjustments and for exposure to restricted markets or assets classes (such as international equity securities and currencies). Invesco believes that derivative instruments are essential tools that assist in generating positive risk-adjusted returns for investors. Our funds do not use derivative instruments solely to amplify a fund's market risk by way of one-way directional bets that seek a levered payout of a single sector, commodity or benchmark index, such as certain "3x funds."[6]

Based on our extensive experience, we believe that retail investors would lose access to products that play a critical role in managing market risk and volatility if the Commission implements the Proposal in its current form. These products, which continue to experience increasing demand in the marketplace, include fixed income, target-date retirement, international equity and tactical allocation funds that are, for example, constructed to: target a range or maximum market volatility; provide downside protection that has proven successful during stressed market conditions; dynamically manage risk and exposures over a defined period pursuant to an investment "glide path"; and execute complex strategies, such as market-neutral strategies or relative value trades (i.e., pair trades) that offer lower risk than a directional trade with a market bias.[7] As discussed further below, Invesco's

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[5] For example, a fund's inability to invest in USD denominated Australian 10 Year Bond futures contract, Canadian 10 Year Bond futures contract or Japan 10 Year Bond futures contract in lieu of non-U.S. physical holdings denominated in foreign currencies would expose a fund and its investors to foreign currency risk.

[6] 3x funds include certain registered funds, predominately ETFs, having strategies that seek daily investment results of 300% (i.e., 3x) of the performance, or 300% of the inverse of the performance, of a benchmark index that they track, such as the S&P 500 Index, Dow Jones U.S. Oil & Gas Index, Russell 1000 Financial Services Index, among other indices. See generally, FINRA Investor Alert: Leveraged and Inverse ETFs: Specialized Products with Extra Risks for Buy-and-Hold Investors, available at http://www.finra.org/investors/alerts/leveraged-and-inverse-etfs-specialized-products-extra-risks-buy-and-hold-investors#sthash.xCev1Iwu.dpuf

[7] A pair trade involves executing a long position trade with a short position trade involving two correlated reference assets within the same asset class or sector (e.g., long Gold futures contract trade and short Silver futures contract trade). This creates a hedge against the asset class or sector of the two reference assets and reflects an investment adviser's view that one of the reference assets will outperform the other, while avoiding the need to have a directional bias towards underlying reference assets. A pair trade can also help reduce broader market risks in lieu of specific economic drivers (i.e., a pair trade involving long Russian ruble trade and short Canadian dollar trade reduces the commodity risk of this trade because both legs are exposed to crude oil commodity).

recommendations for proposed rule 18f-4 avoid the unintended consequences of curtailing prudent use of derivative instruments while at the same time satisfying the Commission's stated goal of imposing portfolio limitations through "effective and administrable means."[8]

With some modifications, the Proposal could preserve these benefits while still satisfying the Commission's stated goals.

In formulating this comment letter, Invesco is guided by the following key principles:

- Prudent risk-taking is the cornerstone of successful investment management. Imprudent risk taking leads to excessive market risk. Regulation of derivative instruments should differentiate between the two activities.

- Derivative instruments and other complex instruments are typically used as one tool among many, implemented not in isolation but in tandem with other portfolio holdings to achieve an overall portfolio result and risk level.

- Regulators should seek to incorporate lessons learned from existing regulatory regimes that have effectively addressed portfolio limitations in order to avoid unnecessary dissonance in the management of client accounts and investment products in an increasingly globalized market place.

- Risk management programs are valuable but their structure and composition is necessarily unique to each organization. Investment management teams utilizing derivative instruments are important stakeholders in any derivative risk management program.

II. Summary of the Proposal

The Proposal has three primary components: (i) portfolio limitations based on a fund's gross leverage; (ii) new asset segregation requirements; and (iii) a requirement to establish and maintain a derivatives risk management program where a fund engages in more than a limited amount of derivative transactions, or uses complex derivative instruments.

With respect to portfolio limitations on gross leverage, the Proposal includes (i) a leverage limit of 150% of a fund's net assets for funds generally, and (ii) a leverage limit of 300% of a fund's net assets for funds where derivatives transactions, in the aggregate, result in an investment portfolio that is subject to less market risk than if the fund did not use such derivative instruments. The proposed leverage limits are based upon the gross

[8] Proposal at 70 ("On balance, we believe that, for purposes of the proposed rule, a notional amount limitation would be a more effective and administrable means of limiting potential leverage from derivatives than a limitation which relies on other leverage measures that may be more difficult to adapt to different types of fund strategies or different uses of derivatives...").

exposure a fund may obtain through derivative instruments and other senior securities transactions, generally calculated as the sum of (i) the notional amount of each derivative transaction and (ii) the full payment obligation of other senior securities transactions. The Proposal does not permit netting for hedging or risk-mitigation transactions, except where a derivative transaction falls within the narrow exception of a direct offset by having the same type of instrument, underlying reference asset, maturity and other material terms of another derivative instrument in a fund's portfolio.

With respect to the asset segregation requirements, the Proposal changes the amount and character of unencumbered liquid assets a fund must segregate to satisfy its obligations. Under the Proposal, the asset segregation requirement equals the sum of (i) the daily mark-to-market liability (or the fund's out-of-the-money-amount of each trade) and (ii) an additional "cushion", determined by the investment adviser and approved by a fund's board, intended to cover the potential amount payable by the fund if it exited the derivatives transaction under stressed conditions. The new asset segregation requirements narrow the types of unencumbered liquid assets a fund must segregate in order to satisfy its coverage requirement by permitting only cash and cash equivalents as coverage assets.

The Proposal also requires a fund to establish and maintain a formalized derivatives risk management program that involves written policies and procedures reasonably designed to assess the risks associated with the fund's derivatives transactions, including an evaluation of potential risks specifically enumerated in the Proposal. The Proposal requires a fund's board to designate and approve a derivatives risk manager to administer the derivatives risk management program. It also requires that the derivatives risk management function be segregated from the portfolio management of the fund. Additionally, the Proposal requires a fund to have policies and procedures reasonably designed to periodically (but at least annually) review and update the fund's derivatives risk management program, including any models, measurement tools, or policies and procedures that are a part of, or used in, the program in order to evaluate their effectiveness and reflect changes in risks over time.

III. Invesco's Comments on the Proposed Rule

A. The Proposal's effort to limit derivatives exposure is overbroad and based upon a flawed rationale.

Although the Commission acknowledges that derivatives play a beneficial role in portfolio construction and that "the notional amount is not a risk measure"[9], the Proposal imposes overly broad limits that treat all derivatives alike. In so doing, the Proposal effectively ignores the many beneficial ways in which asset managers use derivative instruments to achieve their investment objectives and to control risk. We believe the Commission recognizes these shortcomings but nonetheless has relied upon a few problematic assumptions in crafting the Proposal.

[9] Proposal at 70.

First, the Commission's Division of Economic and Risk Analysis ("DERA"), which prepared the white paper that the Commission cites as support for the proposed leverage limits, concedes that it did not consider how any of the funds it randomly sampled use derivatives in the context of these funds' investment strategies.[10] Although the Commission acknowledges that "[f]unds use derivatives both to obtain investment exposures as part of their investment strategies and to manage risk,"[11] the Proposal effectively imposes a one-size-fits-all approach that would only make sense if all funds used derivatives in the same manner.

Second, the Commission appears to base its reasoning for the proposed leverage limits on cases involving funds using derivative instruments to greatly amplify their market risk by way of one-way directional bets/market exposure.[12] This compounds the problem of the Proposal treating all funds alike because most funds potentially impacted by the Proposal do not use derivatives in such a manner. Noticeably absent from the Proposal is any analysis of the distinction between the risks associated with speculative derivatives use on the one hand and the risks associated with hedging or risk-mitigating derivatives use on the other. Moreover, the Commission has not offered any statistical evidence of a correlation between derivatives investments used for hedging or risk-mitigation purposes and increased risk to a fund's portfolio.

Invesco agrees with the views Commissioner Piwowar expressed in his dissenting statement to the Proposal that,

> "absent data indicating that a separate specified leverage limit is warranted there is no justification for imposing any additional requirements or burdens on funds. This is particularly the case

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[10] Use of Derivatives by Registered Investment Companies Division of Economic and Risk Analysis (2015), at 1 ("...granular information is not available on the extent to which funds may be making use of derivatives in pursuing their investment strategies."), available at http://www.sec.gov/dera/staff-papers/white-papers/derivatives12-2015.pdf

[11] Proposal at 12.

[12] See, e.g., Proposal at 46, footnotes 123, 124, 126, citing In the matter of Oppenheimer Funds, Inc. and Oppenheimer Funds Distributor, Inc., Investment Company Act Release No. 30099 (June 6, 2012) (fund vastly amplified its long position in CMBS via long TRS contracts that referenced a CMBS index); In the matter of Claymore Advisors, LLC, Investment Company Act Release No. 30308 (Dec. 19, 2012); (adviser vastly amplified the fund's long S&P 500 exposure via short S&P 500 put options and short variance swaps); In the matter of Fiduciary Asset Management, LLC, Investment Company Act Release No. 30309 (Dec. 19, 2012) (sub-adviser vastly amplified the fund's long S&P 500 exposure in via short S&P 500 put options and short variance swaps); In the Matter of UBS Willow Management L.L.C. and UBS Fund Advisor L.L.C., Investment Company Act Release No. 31869 (Oct. 16, 2015) (fund's primary strategy of short distressed debt vastly amplified via the fund's long position in CDS contracts).

> given that our current guidance to funds concerning their derivatives transactions rests solely on asset segregation."[13]

Invesco believes that the Proposal's failure to differentiate between speculative derivative trades and risk-mitigating trades would unduly prevent asset managers from efficiently and effectively achieving their funds' investment objectives, including risk limitation objectives. For instance, many strategies use derivatives and employ higher amounts of leverage, such as certain market neutral strategies, yet deliver returns to investors which are lower in risk and volatility compared to more traditional investment strategies that rely exclusively on equity or fixed income securities. Imposing portfolio limitations based on gross notional exposure may lead to unintended consequences, including increasing risk to fund portfolios. In particular, replacing derivative instrument exposures with physical holdings of the derivative's reference asset could increase a fund's portfolio risk (see footnote 5, *supra)*. In light of these considerations, we ask that the Commission not adopt the proposed leverage limits. Alternatively, we encourage the Commission to engage in further study and analysis to more clearly substantiate the need for, and effectiveness of, gross leverage limits in reducing the speculative character of a fund investing in derivative instruments.

B. The proposed leverage limits under a notional amount framework are unnecessary in light of the new asset segregation requirement which serves as a functional limit on leverage.

Invesco believes the Proposal strikes the right balance in requiring a fund to segregate the sum of the "mark-to-market coverage amount" and "risk-based coverage amount or cushions" (collectively, the "Derivatives Coverage Amount").[14] We believe these new asset segregation requirements would serve as a functional limit on the amount of leverage a fund may obtain through the use of derivative instruments and other senior securities transactions, thereby alleviating the need to impose arbitrary limits on notional exposure that would create a number of harmful unintended consequences for funds and their investors.[15] As such, we believe that the asset segregation requirements render the Proposal's leverage limitations unnecessary.

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[13] See Michael S. Piwowar, Dissenting Statement at Open Meeting on Dissenting Statement at Open Meeting on Use of Derivatives by Registered Investment Companies and Business Development Companies, SEC (Dec. 11, 2016), https://www.sec.gov/news/statement/piwowar-dissenting-statement-use-of-derivatives-funds.html

[14] Under the Proposal, for all derivative transactions the asset segregation requirement is equal to the sum of (i) the daily mark-to-market liability (or the fund's out-of-the-money-amount of each trade) and (ii) an additional "cushion", determined by the adviser and approved by a fund's board, intended to cover the potential amount payable by the fund if it exited the derivatives transaction under the stressed conditions. Proposal at 156.

[15] See Michael S. Piwowar, Dissenting Statement at Open Meeting on Dissenting Statement at Open Meeting on Use of Derivatives by Registered Investment Companies and Business Development Companies, SEC (Dec. 11, 2016) ("new [asset segregation] requirements should serve as a functional leverage limit on funds as well as ensure funds' ability to meet their obligations arising from their derivatives usage, consistent with the original intent of the asset segregation approach specified by the Commission in Release 10666."), https://www.sec.gov/news/statement/piwowar-dissenting-statement-use-of-derivatives-funds.html

C. A risk-based approach to leverage limits, coupled with stress testing, addresses the Commission's stated goal of limiting speculative derivative use while preserving beneficial uses of derivatives.

i. Notional Amount of a Derivatives Transaction is not a Risk Measure

As the Commission acknowledges, the Proposal's approach to leverage limits has significant limitations:

> "Although we believe that the notional amount generally serves as a measure of the fund's exposure to the underlying reference asset or metric, we recognize that a derivative's notional amount does not reflect the way in which the fund uses the derivative and that the notional amount is not a risk measure."[16]

A leverage limit based on gross notional exposure is inherently flawed because greater economic leverage does not necessarily mean greater risk. Simply summing the notional amount of a fund's derivative investments provides a distorted picture of risk because it disregards the effects of any hedging or risk-mitigating derivatives transactions. Consequently, the Proposal's general limits on a fund's gross notional exposure across all derivative instruments will not serve to limit risk and volatility uniformly across all funds that invest in derivative instruments. As the Commission explained in the Proposal, the risk and volatility profile of two different derivative instruments, both with the same notional amount, may be vastly different:

> "notional amounts therefore could be viewed as a relatively blunt measurement in that different derivatives transactions having the same notional amount but different underlying reference assets assets—for example, an interest rate swap and a credit default swap having the same notional amount—may expose a fund to very different potential investment risks and potential payment obligations."[17]

So although a leverage limit based on notional amounts has an ostensible benefit in terms of simplicity, it has an associated cost: it treats all of a fund's derivatives transactions as though they were the one-way speculative directional bets made by the funds in the Proposal's case studies (see footnote 12, *supra*). We urge the Commission to heed its own words as this "relatively blunt measurement" would lead to unintended consequences for many types of funds and strategies, not just the narrow category of alternative strategy

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[16] Proposal at 70.

[17] Id.

funds and certain leveraged ETFs that the Commission suggested could simply "scale down their aggregate exposures or otherwise de-lever their funds."[18] A potential unintended consequence of a fund having to de-lever is an increase in that fund's market risk, which is precisely the risk that the Proposal seeks to reduce under the Proposal's leverage limits. To illustrate, where a fixed income strategy involves exposure to non-U.S. fixed income securities through the use of U.S. denominated listed futures contracts, de-levering in order to obtain replacement exposure through physical holdings of bonds denominated in foreign currencies will create unhedged foreign currency risk, and exposure to an asset class that may not be intended or targeted under the fund's strategy or desired by the fund's investors.

ii. VaR Metric Effectively Imposes Leverage Limits While Satisfying the Commission's Stated Goals Under the Proposal and Avoiding Unintended Consequence to Funds and Their Investors.

If the Commission determines it must impose leverage limitations directly, Invesco believes that the Commission should adopt a risk-based metric coupled with stress testing and enhanced derivatives disclosures in lieu of imposing arbitrary leverage limits based on gross notional exposure. A VaR metric measures the maximum potential loss at a given confidence level (i.e., probability) over a specific time period under normal market conditions.

Under the UCITS regime, a fund may use either a relative VaR or an absolute VaR approach. Under the relative VaR approach, the VaR of the UCITS fund's portfolio cannot be greater than twice the VaR of an unleveraged benchmark securities index.[19] Under an absolute VaR approach, a UCITS fund is limited to a VaR that is no greater than 20% of the UCITS fund's net assets (calculated using a 99% confidence level and a holding period of 20 days which is consistent with many regulatory schemes that use VaR).[20] The absolute VaR's 20% maximum limit was intended as a balanced approach, high enough to permit prudent risk taking yet low enough to provide 'guardrails' to prevent excessive market risk by UCITS funds.[21] Consistent with the UCITS approach, Invesco advocates allowing a fund to

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[18] Id. at 288.

[19] Id. at 124.

[20] Id. at 125, 138 and 141.

[21] See Feedback Statement on Committee of European Securities Regulators (CESR) Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS, Ref.: CESR/10-798 (July28, 2010), at 13-14 (in providing feedback on the responses received to the consultation on CESR's Guidelines on Risk Measurement and the Calculation of Global Exposure and Counterparty Risk for UCITS, the CESR noted that, while respondents recommended that the calculation standards proposed for the VaR approach should be as high as between a 30% and 50%, the CESR determined that an appropriate maximum limit for the absolute VaR approach is not greater than 20%).

determine whether the relative VaR or absolute VaR approach is appropriate for a fund based on the fund's investment strategy.[22]

Firms and regulators across the globe acknowledge the benefits of the VaR metric. As the Commission noted as early as 1997 in its proposed release for capital and margin requirements for OTC derivatives dealers, many firms use VaR modeling to analyze, control and report their level of market risk. Various U.S. and global regulators also use VaR as a common risk measurement system and a minimum standard for capital adequacy of banks.[23] The primary benefits of VaR for investment advisers include facilitating consistent and regular monitoring of market risk and monitoring the extent to which hedging strategies are accomplishing their desired objectives.[24] In addition, VaR models can be compared across different markets and different exposures, are a universal metric that applies to all activities and to all types of risk, and can be measured at any level, from an individual trade or portfolio, up to a single enterprise-wide VaR measure covering all the risks in the firm as a whole.[25] When aggregated (to find the total VaR of larger portfolios) or disaggregated (to isolate component risks corresponding to different types of risk factors), VaR takes into account dependencies between the constituent assets or portfolios.[26] For these reasons, VaR analysis has become the standard risk management tool among many global firms and regulators. We therefore recommend that the Commission adopt a VaR approach similar to the UCITS guidelines for purposes of imposing limits on the amount of leverage a fund may obtain through the use of derivative instruments.

Invesco notes that many U.S. investment advisers offer products in the European markets, including UCITS funds subject to the VaR requirements (in particular, the relative VaR approach and the absolute VaR approach, as applicable). Adopting a VaR approach not only effectively limits potentially conflicting regulatory regimes for such firms but has the added benefit of enabling such firms to leverage existing infrastructure used by those UCITS funds to satisfy the risk limits applicable to the UCITS funds.

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[22] See, for example, the UCITS guidelines which provide that the relative VaR approach should be used by a fund employing investment strategies with a leverage-free benchmark whereas in contrast, the absolute VaR approach would be more suitable for a fund that invests in multiple asset classes and that defines its investment target in relation to an absolute return target, rather than to a benchmark.

[23] See Securities Exchange Act Release 34-39454 (December 17, 1997), at 33-34 ("Rules adopted recently by the Board of Governors of the Federal Reserve System, the Office of the Comptroller of the Currency, and the Federal Deposit Insurance Corporation (collectively, the "U.S. Banking Agencies") were designed to implement the [Basel Accord] for U.S. banks and bank holding companies. Appendix F [of this Release] is generally consistent with the U.S. Banking Agencies' rules, and incorporates the quantitative and qualitative conditions imposed on banking institutions.").

[24] Value at Risk for Asset Managers, Christopher L. Culp, Ron Mensink, CFA, and Andrea M.P. Neves, Derivatives Quarterly, Vol. 5, No. 2 (Winter 1998), at 28-29.

[25] Market Risk Analysis Volume IV: Value-at-Risk Models by Carol Alexander (2009), available at https://www.safaribooksonline.com/library/view/market-risk-analysis/9780470997888/11_chapter001.html

[26] Id.

iii. Applying Stress Testing as a Complement to VaR Analysis Addresses the Commission's Concerns Regarding the Shortcomings of VaR Analysis

Use of a VaR metric as a risk measurement and framework for leverage limits, coupled with stress-testing which is consistent with UCITS guidelines, fully addresses both the Commission's stated goals under the Proposal and the Commission's concerns regarding the use of the VaR approach. The Commission has expressed its concern that VaR cannot incorporate all possible risk outcomes, notably "tail risk."[27] However, as the Commission also noted, "stress testing is used increasingly as a complement to the more standard statistical models used for VaR analysis."[28] Stress testing serves as a valuable complement to VaR analysis and it directly addresses the Commission's reservations about a VaR approach.

Stress-testing provides risk managers with a clear idea of the vulnerability of a defined portfolio and measures the potential loss that may be suffered in a hypothetical scenario of crisis.[29] Complementing a VaR approach with ongoing stress testing requirements addresses the Commission's stated concerns about "tail risk" and VaR's dependence on the historical trading conditions during the measurement period, which may dramatically change between stressed conditions and benign trading conditions.

Regulators and a large segment of the investment management industry have also developed stress testing tools for their own monitoring purposes.[30] Stress testing plays an important role in Invesco's risk management and in all stages of Invesco funds' investment process, including risk allocation, internal limit setting and hedging, for our U.S. registered investment company products, among other investment products. Broadly speaking, risk managers can develop a stress-testing exercise in various ways:

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[27] Proposal at 126-127; compare Proposal at 346 ("[the Commission's] concern with respect to an absolute VaR method is that the calculation of VaR on a historical basis is highly dependent on the historical trading conditions during the measurement period and can change dramatically both from year to year and from periods of benign trading conditions to periods of stressed market conditions").

[28] Federal Reserve Bank of San Francisco Economic Letter at 1; see also, Invest. Mgmt. and Financial Innovations Paper, at 72 ("In general, the Stress-Testing exercise always implies a higher level of risk measured in terms of VaR").

[29] Applying Stress-Testing On Value at Risk (VaR) Methodologies, Investment Management and Financial Innovations, José Manuel Feria Domínguez, María Dolores Oliver Alfonso (April 2004), at 62, available at http://businessperspectives.org/journals_free/imfi/2004/imfi_en_2004_04_Dominguez.pdf; see also, Stress Testing in the Investment Process, Ruban, Oleg A. and Melas, Dimitris and MSCI Inc. (August 3, 2010), at 2 ("Stress tests explore the tails of the loss distribution by looking at the extent of potential large portfolio losses and possible scenarios in which these losses can occur. Stress tests help identify and manage situations that can result in extreme losses."), available at http://dx.doi.org/10.2139/ssrn.1708243

[30] See, e.g., Federal Reserve Bank of San Francisco Economic Letter at 2-3 ("the Federal Deposit Insurance Corporation uses a stress-testing model to identify depository institutions that are potentially vulnerable to real estate markets. The model is calibrated to the New England real estate crisis of the early 1990s, which caused the closure of several depository institutions. With regard to interest rate risk, the Federal Reserve System maintains a duration-based valuation model that examines the impact of a 200-basis-point increase in rates on bank portfolio values. (internal citation omitted) The model can be used to detect banks that would appear to be the most vulnerable to rising interest rates.").

Historical Scenarios of Crisis: Scenarios are chosen from historical disasters such as the US stock market crash of October 1987, the bond price falls of 1994, the Mexican crisis of 1994, the Asian crisis of 1997, the Argentinean crisis of 2001, financial crisis of 2007 - 2009, etc.

Stylized Scenarios: Simulations of the effects of some market movements in interest rates, exchange rates, stock prices and commodity prices on the portfolio. These movements are expressed in terms of both absolute and relative changes, such as:

- Parallel yield curve in ±100 basis points
- Stock index changes of ±20%
- Currency changes of ±10%
- Commodity changes of ±40%
- Volatility changes of ±20%

Hypothetical Events: A reflection process in which we consider the potential consequences of certain hypothetical situations such as an earthquake, an international war, a terrorist attack, etc.[31]

The key advantage of stress tests under scenarios (such as the three above) is that they link a loss to a specific event, which can be more meaningful to portfolio managers than a summary statistic of the loss distribution.[32] Under the UCITS guidelines, a fund that uses the VaR approach should design its risk management process to include a rigorous, comprehensive and risk adequate stress-testing program. The stress-testing program should be designed to measure any potential major depreciation of the UCITS fund's value as a result of unexpected changes in the relevant market parameters and correlation factors.

Similarly, the Commission could prescribe various historical periods and various prescribed shocks, such as the shocks indicated under the above "Stylized Scenarios" and investment advisers could, where necessary and based upon the results of the stress-testing, make appropriate portfolio adjustments. Indeed, VaR used in isolation as a risk metric could be limiting, as the Commission observed.[33] This is why "stress-testing is used increasingly as a complement to the more standard statistical models used for VaR

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[31] Applying Stress-Testing On Value at Risk (VaR) Methodologies, Investment Management and Financial Innovations ("Invest. Mgmt. and Financial Innovations Paper"), José Manuel Feria Domínguez, María Dolores Oliver Alfonso (April 2004), at 62-63, available at http://businessperspectives.org/journals_free/imfi/2004/imfi_en_2004_04_Dominguez.pdf

[32] Stress Testing in the Investment Process, Ruban, Oleg A. and Melas, Dimitris and MSCI Inc. (August 3, 2010), at 2, available at http://dx.doi.org/10.2139/ssrn.1708243

[33] See footnote 9, *supra*.

analysis."[34] Accordingly, use of a VaR metric as a risk measurement and framework for leverage limits, coupled with stress-testing which is consistent with UCITS guidelines, fully addresses both the Commission's stated goals under the Proposal and the Commission's concerns regarding the use of the VaR approach.

iv. Enhanced Disclosures Further Complement the Use of VaR and Stress Testing

As a further complement to the use of VaR and stress testing, Invesco suggests that funds provide enhanced derivatives disclosure. This enhanced disclosure could resemble the disclosure required under the Committee of European Securities Regulators ("CESR") UCITS guidelines. Specifically, in the interest of providing increased transparency for investors, CESR calls for additional disclosure relating to calculation of risk. The UCITS guidelines require a UCITS fund to disclose in its annual report the method it uses to determine global exposure.[35] If the UCITS fund uses a VaR measure, it should provide, at a minimum, information such as the lowest, the highest and the average utilization of the VaR limit calculated during the financial year.[36] In addition, a UCITS fund should disclose the model and inputs used for calculation (calculation model, confidence level, holding period, length of data history). Additionally, if the UCITS fund uses the relative VaR approach, it should disclose certain data on the reference portfolio.[37]

D. Should the Commission proceed with the proposed leverage limits under a notional amount framework, the Commission should permit risk-based offsets to the calculation of aggregate exposure.

Should the Commission retain the leverage limitation requirements of the Proposal, Invesco recommends that the Commission permit risk-based offsets as part of the calculation of aggregate notional exposure. Several market- and/or regulatory-based methodologies for risk-based offsets already exist, including the CME's widely adopted Standard Portfolio Analysis of Risk ("SPAN") methodology which recognizes risk-based offsets in connection with two or more derivative instruments cleared by a clearing house and traded by the same principal.

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[34] Federal Reserve Bank of San Francisco Economic Letter at 1; see also, Invest. Mgmt. and Financial Innovations Paper, at 72 ("In general, the Stress-Testing exercise always implies a higher level of risk measured in terms of VaR").

[35] UCITS's Investments in Derivatives - CESR's Guidelines on Risk Measurement and Calculation of Global Exposure and Counterparty Risk, K&L Gates, Investment Management Analysis, June 2010, available at http://www.klgates.com/files/tempFiles/b1512b7b-aac6-49be-bc8f-04eb536c59ae/UCITS_Investments_in_Derivatives.pdf

[36] Id.

[37] Id.

Although global clearing houses and exchanges have adopted differing methodologies for recognizing risk-based offsets, they share a common approach: margin requirements associated with two or more derivative instruments cleared by them or traded on their exchanges, respectively, and entered into by the same principal, should be proportionate to the corresponding risk that such instruments pose in the aggregate.[38] Notably, in connection with the CFTC's final rule regarding its clearing mandate for certain swaps, the CFTC addressed how clearing houses manage risk with respect to interest rates swaps cleared by them:

> "The [derivatives clearing organizations ("DCOs")] also risk manage and set margins for interest rate swaps on a portfolio basis rather than on a transaction- or product-specific basis. In other words, the DCOs analyze the cumulative risk of a party's portfolio. By looking at risk on a portfolio basis, the DCOs effectively take into account how swaps with different attributes, such as underlying currency, stated termination dates, underlying floating rate indexes, swap classes, etc., are correlated and thus can offset risk across attributes. This is possible because, although individual transactions may have unique contract terms, given the commonalities of transactions as discussed above, swap portfolios can be risk managed on a cumulative value basis taking into account correlations among the cleared swaps."[39]

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[38] See, for example, the following clearing houses and exchanges which adopted SPAN risk-based margining methodology and/or adopted spread margins for pair trades and package trades: CME, CBOT, NYMEX: http://www.cmegroup.com/clearing/cme-clearing-overview/performance-bonds.html#3 (adopted SPAN risk-based margining methodology; adopted spread margins for pair trades and package trades); LCH: http://www.lchclearnet.com/risk-collateral-management/margin-methodology/pairs) (adopted SPAN risk-based margining methodology); ASX: http://www.asx.com.au/services/clearing/margins-capital-based-position-limits.htm (adopted SPAN risk-based margining methodology); TSEJ: http://www.jscc.co.jp/en/cash/futures/marginsystem/margin.html (adopted SPAN risk-based margining methodology); SGX: http://www.sgx.com/wps/portal/sgxweb/home/clearing/derivatives/financial_safeguards (adopted SPAN risk-based margining methodology); MEXDER: http://www.asigna.com.mx/wb3/wb/ASG?externa=ASG_aportaciones_iniciales_minimas/_aid/299?language=en (adopted spread margining methodology); LICDE (TMX): http://www.cdcc.ca/risk_margining_en (adopted SPAN risk-based margining methodology); HKFE: http://www.hkex.com.hk/eng/market/rm/rm_dcrm/riskdata/margin_hkcc/margin.htm (adopted spread margining methodology); NSE: http://www.nseindia.com/products/content/derivatives/equities/margins.htm (adopted spread margining methodology); ICE Futures U.S.: https://www.theice.com/publicdocs/futures_us_reports/all/Futures_US_Margin_Requirements.pdf (adopted spread margins for pair trades and package trades); TSEJ: http://www.jpx.co.jp/english/derivatives/rules/margin/outline/ (adopted SPAN risk-based margining methodology).

[39] Clearing Requirement Determination Under Section 2(h) of the CEA, 77 Fed. Reg. 7428 (December 13, 2012) ("CFTC Clearing Mandate Final Rule"), at 74301.

Central clearing houses not only serve a critically important function in derivative instruments markets, but they occupy a unique role in derivative instruments cleared through their firms: they, along with their bank and dealer clearing members, bear financial losses should the clearing house's risk management prove to be unsuccessful. In other words, a central clearing house's failure to properly account for the risks associated with a portfolio of derivatives cleared by it could threaten its financial viability and by extension, the global markets. Against that background, we note that central clearing houses manage risk of the derivatives cleared by them on a portfolio basis rather than on an instrument-by-instrument basis. Central clearing of OTC derivative instruments and exchange traded derivatives has become the global gold standard for risk management.[40] This is because the way central clearing houses manage risk has been battle-tested through the most severe market stress, as Federal Reserve Chairman Ben Bernacke noted in 2011:

> "As clearinghouses developed, their resilience--in particular, their ability to manage their liquidity and ensure the integrity of transactions under stressed conditions--was tested by financial shocks and crises...[over] three historical episodes...: the financial panic of 1907, the 1987 stock market crash, and the [2008 financial] crisis...Overall, the historical record shows that clearinghouse arrangements have generally withstood even severe crises."[41]

Invesco believes that any leverage limitation should reflect risk management on a portfolio basis rather than an instrument-by-instrument basis, which is in harmony with longstanding market methodology of clearing houses and exchanges in respect of derivative instruments cleared by them and trade on their exchanges, respectively; based on a proven track record through periods of severe market stress; and consistent with global regulatory requirements in respect risk management of OTC derivative instruments. We therefore recommend that the Commission adopt a final rule that incorporates risk-based offsets in the definition of aggregate exposure, similar to the way global clearing houses and exchanges recognize risk holistically (versus solely on an instrument-by-instrument basis).

Invesco acknowledges that the Commission declined to permit offsets for hedging transactions and risk-mitigation transactions in the calculation of a fund's aggregate

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[40] Financial Stability Board, OTC Derivatives Market Reforms – Ninth Progress Report on Implementation, (April 15, 2010), at 19 ("In September 2009, G-20 Leaders agreed in Pittsburgh that: All standardized OTC derivative contracts should be traded on exchanges or electronic trading platforms, where appropriate, and cleared through central counterparties by end-2012 at the latest..."), available at http://www.fsb.org/2011/04/first-implementation-progress-report-on-over-the-counter-otc-derivatives-market-reforms/

[41] Chairman Ben S. Bernanke, Financial Markets Conference, Stone Mountain, Georgia, April 4, 2011, Clearinghouses, Financial Stability, and Financial Reform, available at http://www.federalreserve.gov/newsevents/speech/bernanke20110404a.htm; see also footnote 39, *supra,* at n. 103 ("[central clearing house] LCH's management of the Lehman Brothers' bankruptcy in September 2008, where upon Lehman's default, LCH needed to risk manage a portfolio of approximately 66,000 interest rate swaps, which it hedged with approximately 100 new swap trades in less than five days and only used approximately 35% of the initial margin Lehman had posted.").

exposure, on the grounds that "many hedges are imperfect, making it difficult to distinguish purported hedges from leveraged or speculative exposures..."[42] While indeed hedging arrangements can be imperfect at times (but nonetheless largely successful in achieving their intended purpose of reducing the market risk of a fund's portfolio), the Commission should not let perfection become the enemy of good. Invesco recommends that, provided a fund can verify that a relevant hedging transaction or risk-mitigating transaction provides a *bona fide* risk reduction to the overall risk of a fund's portfolio, the Commission should permit risk-based offsets in the calculation of aggregate exposure to the extent of such risk reduction (as this would accurately reflect the true risk that a fund's derivative instruments poses to its portfolio in the aggregate).

E. Should the Commission proceed with the proposed leverage limits under a notional amount framework, the Commission should adopt a single leverage limit of at least 300%.

Should the Commission retain the leverage limitation requirements of the Proposal, we encourage the Commission to adopt a single leverage limit of at least 300% (in addition to the risk-based offsets), which would satisfy the Commission's objective of capping leverage while avoiding the potential problems of its proposed bifurcated approach.[43] An unintended consequence of the Proposal is that it creates an incentive for funds to invest in riskier securities to increase the fund's "securities VaR" to qualify for the Commission's proposed 300% leverage limit. The Proposal could also lead to funds having to switch between the 150% and 300% limits in such a way that would unnecessarily detract from the investment process without increasing investor protections. Moreover, while we think funds should monitor VaR to evaluate overall portfolio risk, comparing "portfolio VaR" and "securities VaR" on a routine basis adds complexity without any corresponding benefit in managing risk within a fund. To the extent that the Commission determines it needs to set a fixed notional limit on leverage, a single leverage limit of at least 300% achieves that goal in a much simpler manner and avoids the unintended consequences mentioned above. As such, the Commission should impose adopt a single leverage limit of at least 300%.

F. Portfolio limitation testing should be on an end-of-the-day basis and the compliance period for a fund's applicable portfolio limitation should be at least five (5) business days after entry into a new senior securities transaction.

The Proposal would require a fund to test its aggregate exposure immediately prior to entering into each senior securities transaction to determine that the fund can comply with its applicable portfolio limitation.[44] This requirement entails testing and monitoring a

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[42] Proposal at 94.

[43] For the reasons discussed under in sections III.B of this comment letter, Invesco believes that the leverage limitations proposed by the Commission in the Proposal are arbitrary and unnecessary.

[44] Proposal at 246-247; proposed rule 18f-4(a)(1).

fund's aggregate exposure (and in some cases, the VaR test associated with the 300% leverage limit) on a real-time basis throughout the trading day each time a fund intends to enter into a senior securities transactions.

Testing for compliance with the applicable leverage limitation on a real-time basis throughout the trading day is not practicable, especially in terms of the Proposal's VaR test requirement to calculate, on a pre-trade basis, the portfolio VaR taking into account a potential new derivative transaction. We are not aware any compliance system that can satisfy this requirement. This issue is exacerbated in the case of Invesco's sub-advised accounts and multi-manager funds where there may several investment managers for a given fund. This is because the Proposal would require testing and monitoring systems of all senior securities transactions across each sub-adviser of a sub-advised product and across each investment manager of a multi-manager fund structure. Therefore, such real-time testing on an intra-day basis whereby data systems across many investment advisers of sub-advised funds and/or many investment managers of multi-manger funds would be an enormous undertaking, requiring a tremendous build-out of information technology infrastructure at a significant expense to funds and their investors.[45] Further, compliance with an applicable portfolio limitation at all times would constrain a fund's ability to enter into hedging or risk-mitigating derivative transactions where a fund is close to its applicable leverage limit. For example, where a new derivative transaction would cause a decrease in the overall risk to a fund's portfolio, such transaction may nonetheless be prohibited because it would cause a breach of the applicable leverage limitation.

In order to mitigate these operational issues and provide a fund with the flexibility to enter into hedging and risk-mitigating derivatives transactions, in particular during times of market stress or volatility, Invesco recommends that the SEC require a fund to test its aggregate exposure immediately at the end of the business day and allow for a compliance period of at least five (5) business days after entry into a new senior securities transaction.

G. The Commission should clarify the calculation of notional amount for volatility derivatives and variance derivatives.

Invesco suggests that the Commission clarify the Proposal's formula for calculating the notional amount of volatility derivatives and variance derivatives as these products should be adjusted to equal current vega multiplied by the current implied volatility. This is because the calculation of notional amount for volatility derivatives and variance derivatives should reflect that the appropriate underlying reference asset is the index volatility not the index level. Currently, the Commission's formula produces a result that is unrelated to the risk of a volatility derivative instrument or a variance derivative instrument.

H. The Commission should expand the definition of "Qualifying Coverage Assets" to include non-cash collateral subject to appropriate haircuts.

[45] We have estimated that the initial cost of implementing the Proposal would be, in the aggregate, approximately $10 million with ongoing costs in the aggregate of over $1 million per year.

Although Invesco supports the Proposal's asset segregation methodology, we encourage the Commission to align its definition of acceptable coverage assets with those of the marketplace and global regulators as it relates to "eligible collateral" in support of derivatives obligations. The Proposal provides that a fund must satisfy its Derivatives Coverage Amount by segregating a narrow category of liquid assets, compromised only of cash and cash equivalents. However, the Commission's own longstanding guidance allows non-cash collateral to qualify as "qualifying coverage assets" for derivatives transactions. The Commission seems to have abandoned its guidance because cash and cash equivalents "may be less likely to experience volatility in price or decline in value in times of stress than other types of assets."[46]

Invesco finds the Commission's concerns misplaced, unnecessarily restrictive and potentially disadvantageous to fund investors. Specifically, under the Proposal, both a fund's "mark-to-market coverage amount" and its "risk-based coverage amount" involve a daily mark-to-market. Accordingly, on a daily basis a fund would be obligated to continue to over-collateralize its aggregate obligations under its derivative transactions (since the "risk-based coverage amount" covers future potential obligations of the fund). Invesco encourages the Commission to consider a middle ground whereby it would allow for the segregation of non-cash collateral subject to appropriate haircuts commonly recognized in the industry and permitted by global regulators. Such an approach addresses precisely the concern raised by the Commission in the Proposal – a potential intraday decline in the value of the collateral during times of stress – and would not artificially constrain or alter the holdings of a fund that would not otherwise maintain cash and cash equivalents.[47]

The Proposal's overly restrictive definition of "qualifying coverage assets" would create several unintended consequences, including forcing a fund to hold significant cash positions that could be contrary to a fund's investment strategy; causing a "drag" on a fund's performance because a fund's investments in non-cash and non-cash equivalents is hindered; and effectively increasing costs to investors because they are paying management fees on a significantly larger portion of fund assets that will remain necessarily uninvested and unmanaged.

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[46] Proposal at 154-155.

[47] See, for example, CFTC's Margin Requirements for Covered Uncleared Swaps for Swap Dealers and Major Swap Participants, Final Rule, 81 Fed. Reg. 636, at 669 (January 6, 2016) (allowing the use of non-cash collateral and noting that the schedule of standardized haircuts by assets class "have been calibrated to be broadly consistent with valuation changes observed during periods of financial stress"); Prudential Regulators' Margin and Capital Requirements for Covered Swap Entities, Final Rule, 80 Fed. Reg. 74840, at 74844-5 (November 30, 2015) (allowing the use of non-cash collateral and noting that "[e]ligible collateral is generally limited to high-quality, liquid assets that are expected to remain liquid and retain their value, after accounting for an appropriate risk-based "haircut" or "discount," during a severe economic downturn."); see also, Basel Committee on Banking Supervision and International Organization of Securities Commissioners, Margin Requirements for Non-Centrally Cleared Derivatives (March 2015), available at http://www.bis.org/bcbs/publ/d317.pdf (final policy framework establishing the use of non-cash collateral, noting that "haircuts serve a critical risk management function in ensuring that pledged collateral is sufficient to cover margin needs in a time of financial stress.").

Finally, the use of non-cash collateral to support derivatives transactions is consistent with market convention and the Dodd-Frank Act.[48] The use of different types of eligible collateral should also incrementally increase liquidity in the financial system. Moreover, the types of non-cash collateral currently permitted by U.S. and global regulators are highly liquid and resilient in times of stress.[49] Invesco therefore recommends that the Commission expand the definition of "qualifying coverage assets" to include non-cash collateral subject to appropriate haircuts.

I. The Commission should permit offsets for posted margin of financial commitment transactions in the same manner that the Commission permits offsets for posted margin of derivatives transactions.

The Proposal generally provides that a fund may deduct from its Derivatives Coverage Amount the amount of margin posted by the fund. However, the Proposal does not include a similar offset for posted margin associated with financial commitment transactions. Invesco therefore recommends that the Commission treat posted margin of financial commitment transactions in the same manner as posted margin for derivatives transactions, in order to avoid any disparate treatment of financial commitment transactions, such as double counting or "over-segregation" for financial commitment transactions.

J. Invesco Supports the Establishment of Principles-Based Formalized Derivatives Risk Management Programs.

Invesco supports the Commission's goals regarding the oversight of a fund's use of derivatives. As the Commission noted, many firms, like Invesco, already have robust programs in place that meet or exceed the Commission's expectations. Programs like those at Invesco have been developed in support of independent investment processes carried out by the investment teams within a firm. While we appreciate the Commission's desire to require all firms with funds that use derivatives above a certain threshold to have robust programs in place, we believe there is an unnecessary and potentially damaging disconnect if the program is separate and apart from the actual investment process. We believe the final rule should instead allow firms to structure their derivatives risk management programs in a manner consistent with their risk and portfolio management processes.

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[48] See Prudential Regulators' Margin and Capital Requirements for Covered Swap Entities, Final Rule, 80 Fed. Reg. 74840, at 74845 (November 30, 2015) ("In addition, the margin requirements imposed by the Agencies must permit the use of noncash collateral, as the Agencies determine to be consistent with (i) preserving the financial integrity of the markets trading swaps and (ii) preserving the stability of the U.S. financial system."); CFTC's Margin Requirements for Covered Uncleared Swaps for Swap Dealers and Major Swap Participants, Final Rule, 81 Fed. Reg. 636, at 669 (January 6, 2016) (same).

[49] We note that global regulators, exchanges and clearing houses make no distinction between, or require additional margin for, derivatives transactions and non-cash collateral of the same asset class (i.e., equity total return swap and related margin consisting of physical holdings of S&P 500 index constituents), and for good reason: there is no need since the valuation of a derivative instrument and its supporting margin subject to no less frequent than a daily mark-to-market; the category of permitted non-cash collateral is highly liquid and the associated haircuts are calibrated to be broadly consistent with valuation changes observed during periods of financial stress.

Invesco employs a multi-faceted approach to oversight and risk management that is deeply embedded in its culture, organizational governance and business structure. In the first instance, each investment team has embedded risk controls within its investment management discipline, including review and oversight processes led by each team's chief investment officer which are tailored to that team's philosophy and objectives. The investment teams' processes are bolstered and overseen by multi-dimensional independent controls, including an independent investment performance and risk team responsible for analyzing investment performance, investment activities, and risk, in the context of each team's investment process and philosophy, market environment and client expectations. Invesco takes pride in its comprehensive approach to investment oversight and risk management.

Requiring a single individual to oversee the many inputs to our derivatives risk management program would likely diminish the effectiveness of our overall process of risk management. Likewise, prohibiting investment personnel from participating in the risk management process would result in a less-informed process that would ultimately lead to sub-optimal results. Moreover, to separate out an independent derivatives-based consideration of risks common to the entire portfolio would typically lead to inefficiencies and confusion within the context of an otherwise integrated investment and oversight process. Investor interests are best served by an informed, comprehensive and coherent investment process that considers all relevant factors. The Commission's legitimate role in this regard is to promote a more informed process, while carefully avoiding a rule that sacrifices an investment team's ability and efforts at implementing its process in a comprehensive and coherent manner. As such, we believe the Commission should allow each fund to appoint a derivatives risk manager or committee and that such committees could include portfolio management personnel.

These same general considerations apply with respect to a mutual fund board's oversight of the derivatives risk program. A board best protects investor interests by considering derivatives use when it reviews each fund. We believe that quarterly reporting on derivatives activity within a fund would eclipse the board's duty to evaluate each fund's investment activities and performance holistically. Boards should certainly consider a fund's derivatives use as part of their regular evaluations, and the rule should require that. Accordingly, Invesco recommends that the derivatives risk manager or committee provide written reports to the fund's board as part of regular fund reporting. Additionally, the derivatives risk manager or committee would make additional reports as necessary to identify any material risk issues to the fund's board.

IX. Compliance Dates

In the Proposal, the Commission advised that it would expect to provide a transition period during which it would permit funds to continue to rely on Release 10666, Commission staff no-action letters, and other guidance from the Commission.[50] The Commission also

[50] Proposal at 261.

requested comment on whether the tiered compliance dates under proposed rule 22e-4 (the "Liquidity Proposal") would provide sufficient time for funds to transition to proposed rule 18f-4. Under the Liquidity Proposal, the Commission proposed a compliance period of 18 months for larger entities and an extra 12 months (30 total months) for smaller entities.

Invesco expects significant operational, compliance and technology challenges, both in terms of time and costs, in connection with transitioning to the final rule contemplated under the Proposal. The necessary changes would encompass many areas of fund operations, including policies and procedures relating to the derivatives risk management program; leverage and asset segregation testing and monitoring; recordkeeping; disclosures; financial reporting; and restructuring funds to comply with the rule, as necessary.[51] We believe that 24 months is a reasonable amount of time to accomplish the foregoing and transition all of our funds. As a result, we request that the Commission adopt a transition period for compliance with the terms of final rule 18f-4 of at least 24 months.

X. Conclusion

We appreciate and agree with the Commission's goal of providing a more comprehensive approach to the use of derivative instruments and other senior securities transactions consistent with the investment protection purposes and concerns underlying section 18 of the Investment Company Act. We thank the Commission for its efforts, notably the new asset segregation requirements which we believe largely accomplish these goals. We believe a measured and targeted approach to regulating imprudent risk taking through limits on the amount of leverage a fund may obtain through derivative instruments is more appropriately addressed through either a risk-based metric such the VaR approach coupled with stress-testing or through risk-based offsets should the Commission feel compelled to adopt portfolio limitations under a notional amount framework. We also believe the Commission should allow firms to decide how to best implement their derivatives risk management programs within certain parameters, including allowing flexibility to appoint a committee, which could include investment personnel. In addition, we believe that fund boards should consider derivatives usage and risks in connection with each fund's regular reporting rather than on a quarterly basis.

Invesco is a member of various associations that are also submitting comment letters addressing in more detail public policy considerations similar to those expressed herein. These associations include the Investment Company Institute (ICI), Investment Adviser Association (IAA) and the Securities Industry and Financial Markets Association (SIFMA). Based on drafts reviewed prior to submission and except in those limited circumstances where this comment letter advocates a different view, Invesco endorses the

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[51] These challenges appear to include a necessary build-out of technology infrastructure in order to aggregate prescribed derivatives and financial commitment data across multiple existing systems for purposes of calculating aggregate exposure relating to the portfolio limitations; testing and monitoring for the VaR test associated with the 300% portfolio limitation; calculations of permitted netting and, for "complex derivatives transactions", delta adjustments for options exposure and vega notional amount on variance swaps.

comments expressed in each of the ICI, IAA and SIFMA comment letters, as our overall experience as an asset manager is consistent with the observations made in those letters.

Thank you for the opportunity to submit this letter and for your consideration of these comments. Questions regarding these comments may be directed to the undersigned.

Sincerely,

Invesco Advisers, Inc.

By _____
John M. Zerr
Senior Vice President

cc: The Honorable Mary Jo White, Chair
The Honorable Kara M. Stein, Commissioner
The Honorable Michael S. Piwowar, Commissioner

David Grim, Director, Division of Investment Management
Diane Blizzard, Associate Director, Division of Investment Management